Amendment Date: July 28, 2004

Reply to Office Action of April 30, 2004

Amendments to the Claims:

This listing of claims will replace all prior versions and listing of claims in the application:

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Claim 1 (original): A method for communicating between computer bus modules comprising the steps of:

converting native bus signals from a first computer module to a first pointto-point interface;

conveying the bus signals using the first point-to-point interface to a bus emulator;

conveying the bus signals from the bus emulator using a second point-topoint interface to a second computer module; and

converting the bus signals received at the second computer to a native form.

Claim 2 (currently amended): The method of Claim 1 wherein the step of converting native bus signals from a first computer module to a first point-to-point interface comprises the steps of:

monitoring the native bus signals in order to identify the beginning of a data transfer cycle; and accepting data and address signals from the native bus and serializing these together with an indication of the <u>a</u> type of <u>for the data</u> transfer <u>cycle</u> identified.

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Claim 3 (original): The method of Claim 1 wherein the step of conveying bus signals from the bus emulator to a second computer module comprises the steps of:

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Amendment Date: July 28, 2004

Reply to Office Action of April 30, 2004

receiving the bus signals from the first point-to-point interface in the bus emulator;

translating the first point-to-point interface received in the bus emulator to a bus structure internal to the bus emulator:

conveying the bus signals received in the bus emulator by way of the first point-to-point interface onto said bus structure; and translating the bus signals carried on said bus structure to a second point-to-point interface.

10 Claim 4 (original): The method of Claim 3 wherein the step of conveying the bus signals received in the bus emulator by way of the first point-to-point interface onto said bus structure comprises the steps of:

granting said bus structure to the first point-to-point interface if said bus structure is available; and

propagating the bus signals translated from the first point-to-point interface onto the bus structure if the bus structure is granted to said first point-to-point interface.

Claim 5 (original): A computer system comprising:

plurality of point-to-point interface units comprising a computer module interface and a point-to-point interface; plurality of computer modules connected to the computer module interface of the plurality of point-to-point interface units; and bus emulator connected to the point-to-point interface of the plurality of point-to-point interface units.

Claim 6 (original): The computer system of Claim 5 wherein the plurality of point-to-point interface units comprise parallel-to-serial conversion units that operate upon detecting the beginning of a data transfer cycle presented to the computer module interface and wherein the parallel-to-serial conversion units

Amendment Date: July 28, 2004

Reply to Office Action of April 30, 2004

accept a data field and an address field and a cycle-type indicator from the computer module interface.

- Claim 7 (original): The computer system of Claim 5 wherein the plurality of point-to-point interface units comprise high-current parallel drivers capable of propagating data, address and data transfer cycle requests.
 - Claim 8 (original): The computer system of Claim 5 wherein the bus emulator comprises:
- plurality of point-to-point interfaces interconnected by an internal bus.
 - Claim 9 (original): The computer system of Claim 8 further comprising an arbiter for granting access to the internal bus to one of the plurality of point-to-point interfaces.

Claim 10 (currently amended): The computer system of Claim 8 further comprising a cascade port that connects to the internal bus and can be used to extend the <u>a</u>length of the internal bus.

- 20 Claim 11 (original): A computer module comprising a point-to-point interface.
 - Claim 12 (original): The computer module of Claim 11 wherein the point-to-point interface comprises:

parallel-to-serial conversion unit that operate upon detecting the beginning
of a data transfer cycle presented to the computer module interface and
wherein the parallel-to-serial conversion units accept a data field and an
address field and a cycle-type indicator from the computer module
interface and delivers a serial output comprising a data transfer cycle to
the point-to-point interface.

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Amendment Date: July 28, 2004

Reply to Office Action of April 30, 2004

Claim 13 (original): The computer module of Claim 11 wherein the point-topoint interface comprises high-current parallel drivers capable of propagating data, address and data transfer cycle requests.

- 5 Claim 14 (original): A point-to-point interface unit comprising a computer module interface and a point-to-point interface.
 - Claim 15 (original): The point-to-point interface unit of Claim 14 further comprising parallel-to-serial conversion unit that operate upon detecting the beginning of a data transfer cycle presented to the computer module interface and wherein the parallel-to-serial conversion units accept a data field and an address field and a cycle-type indicator from the computer module interface and delivers a serial output comprising a data transfer cycle to the point-to-point interface.

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- Claim 16 (original): The computer system of Claim 14 wherein the plurality of point-to-point interface units comprise high-current parallel drivers capable of propagating data, address and data transfer cycle requests.
- 20 Claim 17 (original): A bus emulator comprising:
 internal bus; and
 plurality of point-to-point interfaces interconnected by the internal bus.
- Claim 18 (original): The bus emulator of Claim 17 an arbiter for granting access to the internal bus to one of the plurality of point-to-point interfaces.
 - Claim 19 (currently amended): The bus emulator of Claim 17 further comprising a cascade port connected to the internal bus and can be used to extend the <u>a</u> length of the internal bus.